~~What is claimed is:~~

1. A combined spring-and-shock-absorber system for supporting wheel suspensions or axles on a vehicle body using a tubular roll bellows arranged between a wheel-bearing or wheel-controlling connection and a connection on the vehicle body side, the bellows being arranged between an outer bell and a rolling piston; on the one hand, the outer bell and the rolling piston, in each case, over the height of the corresponding component, having at least partially varying diameters with respect to the walls that contact the tubular roll bellows, and, on the other and, both ends of the tubular roll bellows being sealingly secured to the rolling piston at segments having different diameters, the lower mounting section having a larger diameter than the upper mounting section,
wherein
- bellows interior (5) is filled with a fluid (1) and communicates with a hydraulic accumulator (70, 44, 62) that is supported on the chassis side and/or vehicle side.

2. The combined spring-and-shock-absorber system as recited in Claim 1,
wherein the tubular roll bellows is an at least two-part differential roll bellows (11).

3. The combined spring-and-shock-absorber system as recited in Claim 1,
wherein both ends of the two bellows parts (12, 13), facing each other, of the mounted differential roll bellows (11) are connected to each other by a connecting sleeve (14).

4. The combined spring-and-shock-absorber system as recited in Claim 1,
wherein the connecting sleeve (14) has a working line (76) that passes through the outer bell (30).

5. The combined spring-and-shock-absorber system as recited in Claim 1,
wherein at least one restrictor or at least two throttle return valves (77, 48, 64) are arranged in the fluid flow between the bellows interior (5) and the hydraulic accumulator (70, 44, 62).

6. The combined spring-and-shock-absorber system as recited in Claim 1,
wherein the fluid (1) is a water-alcohol solution.

7. The combined spring-and-shock-absorber system as recited in Claim 1,
wherein the bellows interior (5), during travel operation, is connected to an external fluid supply via a supply line, for realizing an active spring-and-shock-absorber system.

8. The combined spring-and-shock-absorber system for supporting wheel suspensions or axles on a vehicle body using a tubular roll bellows arranged between a wheel-bearing or wheel-controlling connection and a connection on the vehicle body side, the bellows being arranged between an outer bell and a rolling piston; on the one hand, the outer bell and the rolling piston, in each case, over the height of the corresponding component, having at least partially varying diameters with respect to the walls that contact the tubular roll bellows, and, on the other hand, both ends of the tubular roll bellows being sealingly secured to the rolling piston at segments having different diameters, the lower mounting section having a larger diameter than the upper mounting section,
wherein the bellows interior (5) is filled with a gas.

9. The combined spring-and-shock-absorber system as recited in Claim 8,
wherein
- the roll-bellows halves (12, 13) constitute a differential

roll bellows (11),
- the upper segment (51) and the lower segment (55) constitute a differential roll bellows (50),
- the roll-bellows halves (12, 13) of the differential roll bellows (11) and the upper and lower segments (51, 55) of the differential piston (50) are arranged so as to be opposite each other.

10. The combined spring-and-shock-absorber system as recited in Claims 8 and 10,
wherein the roll-bellows halves (12, 13) roll on the interior surfaces (36, 37) of the upper/lower segment (31, 33) of the outer bell (30) and on the exterior walls (56, 57) of the upper/lower segment (51, 55) of the rolling piston (50).

11. The combined spring-and-shock-absorber system as recited in Claims 8 through 10,
wherein the exterior walls (56, 57) of the rolling piston (50) and the interior surfaces (36, 37) of the outer bell (30) are configured such that the two roll-bellows halves (12, 13), rolling between rolling piston (50) and the outer bell (30), have effective radii that are different from each other.

12. The combined spring-and-shock-absorber system as recited in Claims 8 through 11,
wherein the upper segment (51) of the rolling piston (50), assigned to the one roll-bellows half (12), has a different (larger/smaller) radius than the other segment (55) of the rolling piston (50), assigned to the other roll-bellows half (13).

13. The combined spring-and-shock-absorber system as recited in Claims 8 through 12,
wherein the two roll-bellows halves (12, 13), constituting the differential roll bellows (11), are secured in a pressure-tight manner, on the one side, on the rolling piston (50) using in each case a clamping ring/rolling piston (58, 59)

and, on the other side, on the outer bell (30) using in each case a clamping ring/outer bell (17, 18) and a connecting sleeve (14).

14. The combined spring-and-shock-absorber system as recited in Claims 8 through 13,
wherein the volume (bellows interior 5) enclosed by the differential roll bellows (11), is connected to an accumulator volume (70) and to a pressure pump (supply medium) in a regulatable manner, via tubular connectors (76, 82) located in the wall of the outer bell (30).

15. The combined spring-and-shock-absorber system as recited in Claims 8 through 14,
wherein the rolling piston (50) is configured in a hollow cylindrical fashion to receive a shock absorber (80), the one end of the shock absorber being secured fixedly on the lower end of the rolling piston (88) and the other end of the shock absorber (shock absorber rod 81) being secured fixedly on a covering plate (86) located on the outer bell (30).

16. The combined spring-and-shock-absorber system as recited in Claims 8 through 15,
wherein the rolling piston (50) is configured in a hollow cylindrical fashion and, as a shock-absorber tube, is part of an interior shock absorber (80).